

07



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
 United States Patent and Trademark Office  
 Address: COMMISSIONER FOR PATENTS  
 P.O. Box 1450  
 Alexandria, Virginia 22313-1450  
 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/825,731	04/16/2004	Sanjiv G. Tewani	DP-309395	8825

7590 02/28/2006  
 Delphi Technologies, Inc.  
 M/C 480-410-202  
 P.O. Box 5052  
 Troy, MI 48007-5052

EXAMINER

BURCH, MELODY M

ART UNIT	PAPER NUMBER
----------	--------------

3683

DATE MAILED: 02/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/825,731	TEWANI ET AL.	
	Examiner	Art Unit	
	Melody M. Burch	3683	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 23 December 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 2, 11, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 4720087 to Duclos et al. in view of WIPO 01/51826 (using US Patent 6749045 to Rosenfeldt et al. as an English equivalent).

Re: claims 1, 2, 11, and 12. Duclose et al. show in figure 2 a rheological-fluid hydraulic mount comprising: a) a hydraulic-mount partition plate assembly 12 having a longitudinal axis, having first (top surface) and second (bottom surface) sides, having a non-rheological-fluid first orifice 36a and a rheological-fluid second orifice shown in the openings of 50b, wherein the first orifice has a first terminus disposed at the first side shown in the area of 40a and a second terminus shown in the area of the lead line of number 60 disposed at the second side, and wherein the second orifice has a first end (or top end of elements 50b) disposed at the first side by way of adjacent intervening elements and has a second end (or bottom end of 50b) disposed at the second side by way of adjacent intervening elements; b) a hydraulic-mount decoupler 60 operatively connected to the first orifice, wherein the decoupler is disposed entirely between the first and second sides and entirely radially outward from

the second orifice as shown; c) an electric means 50b shown disposed to influence the second orifice; and d) a flexible membrane assembly having a first membrane portion 44b fluidly-isolating, on the first side of the partition plate assembly, the first end from the first terminus and having a second membrane portion 46b fluidly-isolating, on the second side of the partition plate assembly, the second end from the second terminus.

Duclos et al. fail to include the limitation of the rheological fluid being magnetorheological fluid and the electric means being an electrical coil generating a magnetic influence.

Rosenfeldt et al. teach in col. 5 lines 24-28 the use of a mount or employing magnetorheologic fluid instead of electrorheologic fluid and the use of electric coils instead of electrodes.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the rheological fluid and the electric means of Duclos et al. to have included MR fluid and an electric coil, as taught by Rosenfeldt et al., in order to provide an equally effective way of generating a change in the viscosity of the rheological fluid to generate a desired damping effect.

3. Claims 3, 4, 13, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 4720087 to Duclos et al. in view of WIPO 01/51826 (using US Patent 6749045 to Rosenfeldt et al. as an English equivalent) as applied to claims 2 and 12 above, and further in view of US Patent 4973031 to Takano et al.

Duclos et al., as modified, describe the invention substantially as set forth above

including the use of the field producing electric plates being made up of straight plates (in the case of 50a) or spiral plates (in the case of 50b) to form a straight or spiral second orifice, but lack the limitation of the second orifice being arranged with respect to the electric plates in a fashion that is substantially annular.

Takano et al. teach in figure 2 the use of a second orifice being formed from substantially annular electric plates to form a substantially annular second orifice.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the shape of the electric or field producing plates of Duclos et al., as modified, to have been substantially annular to form a substantially annular second orifice, as taught by Takano et al., to achieve a desired level of fluid flow that is a function not only of the interaction with the field with the fluid, but also a function of the shape of the channel in which the fluid flows.

Examiner also notes that in *In re Dailey*, 357 F.2d 669, 149 USPQ 47 (CCPA 1966) the court held that the configuration of a claimed object was a matter of choice which a person of ordinary skill in the art would have found obvious absent persuasive evidence that the particular configuration was significant.

***Allowable Subject Matter***

4. Claims 5-10 and 15-20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

5. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melody M. Burch whose telephone number is 571-272-7114. The examiner can normally be reached on Monday-Friday (6:30 AM-3:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James McClellan can be reached on 571-272-6786. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3683

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

mmb  
February 22, 2006

*Melody M. Burch*  
**Melody M. Burch**  
**Primary Examiner**  
**Art Unit 3683**  
2/22/06